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## Amendments to the Claims:

- 1. (Previously presented) A method of preparing a chemically modified hemoglobin solution comprising an endogenous antioxidant enzyme, said method comprising:
- a) contacting a stroma free hemoglobin solution with at least one filter, wherein a first filter retains viral particles and allows passage of a filtrate comprising a hemoglobin polypeptide and an endogenous antioxidant enzyme and the filtrate is substantially free of viral contamination;
  - b) chemically modifying the filtrate with an agent; and,
- c) isolating the chemically modified hemoglobin solution and the endogenous antioxidant enzyme, wherein at least one of the endogenous antioxidant enzymes retains enzymatic activity.
- 2. (Previously presented) The method of claim 1, wherein at least one of the endogenous antioxidant enzymes retaining enzymatic activity is selected from the group consisting of a superoxide dismutase, a catalase, and a glutathione peroxidase.
- 3. (Previously presented) The method of claim 1, wherein said first filter allows the passage of at least 50% of the endogenous antioxidant enzymes present in the stroma free hemoglobin solution.
- 4. (Previously presented) The method of claim 1, wherein the first filter comprises a 500,000 molecular weight cutoff filter.
- 5. (Previously presented) The method of claim 1, wherein said first filter reduces the passage of viral particles that are between about 200-25 nm in size.
- 6. (Previously presented) The method of claim 1, wherein said first filter reduces the passage of viral particles that are 80-100 nm in size.

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- 7. (Previously presented) The method of claim 1, wherein said first filter reduces the passage of viral particles that are between about 80-50 nm in size.
- 8. (Previously presented) The method of claim 1, where said first filter reduces the passage of viral particles that are between about 50-25 nm in size.
- 9. (Previously presented) The method of claim 5, wherein said first filter reduces the passage of said viral particles by about 3 to about 10 log units.
- 10. (Previously presented) The method of claim 1, wherein said first filter produces a filtrate having a viral load reduction of at least 3 log units.
- 11. (Previously presented) The method of claim 1 further comprising contacting the filtrate with a second filter wherein said second filter allows the passage of the hemoglobin polypeptide and the endogenous antioxidant enzyme and retains virus particles.

## 12. (Canceled)

- 13. (Previously presented) The method of claim 1, wherein the agent is a bifunctional modifying agent.
- 14. (Currently amended) The method of claim 13, wherein said agent is selected from the group consisting of a sebacyl chloride, a glutaraldehyde, a diasprin derivative derivatives, a polyaldehydes polyaldehydes, a polyoxyetheylene, a dextrans, and an insulin.
- 15. (Previously presented) The method of claim 13, wherein the agent is a bifunctional polyoxyetheylene.

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16. (Previously presented) The method of claim 1, wherein the agent is a mixture of a bifunctional and a monofunctional polyoxyethylene.

- 17. (Previously presented) The method of claim 15, wherein the chemically modified hemoglobin solution comprising an endogenous antioxidant enzyme is PHP.
- 18. (Previously presented) The method of claim 1, wherein chemically modifying said filtrate with an agent comprises deoxygenation and pyridoxalation.
- 19. (Previously presented) The method of claim 1, wherein said chemically modified hemoglobin solution comprising an endogenous antioxidant enzyme comprises a hepatitis A viral titer of less than about 1 TCID<sub>50</sub> unit/ml.
- 20. (Original) The method of claim 1, wherein the chemically modified hemoglobin solution comprises about a 50% to about a 200% increase in endogenous red blood cell antioxidant activity per unit of hemoglobin found in red blood cells.
- 21. (Previously presented) A method of preparing a chemically modified hemoglobin solution comprising an endogenous antioxidant enzyme, said method consisting of:
- a) contacting a stroma free hemoglobin solution with at least one filter, wherein a first filter retains viral particles and allows passage of a filtrate comprising a hemoglobin polypeptide and the endogenous antioxidant enzyme and the filtrate is substantially free of viral contamination;
  - b) chemically modifying the filtrate with an agent; and,
- c) isolating the chemically modified hemoglobin solution and the endogenous antioxidant enzyme.

Claims 22-35. (Canceled)